

## HEALTH CARE INFORMATION LITERACY THE ROLE OF LIBRARIANS

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### ARTICLE INFO

#### **Article History:**

Received: 15 Mar 2017;

Received in revised form:

26 Mar 2017;

Accepted: 27 Mar 2017;

Published online: 27 Mar 2017.

#### **Key words:**

Health care,  
Information,  
Librarian Literacy

### ABSTRACT

In Nigeria, health information literacy problems have grown as health care providers expect patients to assume more responsibility for their care, but the complexity of reading health information makes it difficult for individuals with low general literacy skills to understand effectively in health care information. This paper examined the roles of librarians in health care information literacy. The findings deduced that librarians are expert in applying criteria to information searches, choosing quality content and teaching users how to assess quality in health care information. Besides, librarians support the efforts of health professionals to be lifelong learners, and facilitate recruitment and retention of health professionals in underserved areas by serving as access points and guides to critical health care information. Finally, there is need for strong relationship between health care providers, public libraries, schools and healthcare association.

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### INTRODUCTION

Health seeking and compliance with treatments require patients to understand and apply health information. Health literacy is the ability to obtain, process, and understand health information to make informed decisions about health care (National Institute of Health, 2012). Health literacy relates to the possession of knowledge about health. It is a skill-based processes that individual use to identify and transform information into knowledge. This communication process inherently involves decoding a symbol system such as medical terms, prescription, spoken language or visual elements and placing that information into a useful context. Patients with low health and general literacy skills may have poorer health, higher expenses for health care, a higher rate of hospitalizations, lower

**How to cite this article:** Femi, A., & Oyinade, T., (2017). "Health Care Information Literacy The Role of Librarians". *International Journal of Advanced Scientific Research & Development (IJASRD)*, 04 (03/II), pp. 114 – 121.

self-efficacy for preventive care practices and compliance to treatment regimens (Ross, 2007).

Health information literacy problems have grown as clinicians and health care system providers expect patients to assume more responsibility for their care at a time when the health system is progressively more fragmented, specialised, complex and technologically sophisticated. The complexity of reading health information and the shortage of health information in languages other than English make it difficult for individuals with low general literacy skills and language differences to understand effectively in health care information (Zagaria, 2006). A majority of printed health education materials, regardless of their topic, require relatively high literacy skills that may not exist among many of their target population (Gal and Prigat, 2005).

In the health care sector, particularly the Nigeria, where printed information is frequently provided, this may lead to extreme frustration on the part of the patient. People with speech, language, visual, hearing and intellectual disabilities experience even greater challenges when they need to apply high-level health information literacy skills (Hester and Stevens-Ratchford, 2009). The perspective of people towards health information literacy varies across different healthcare services. A person who functions adequately at home or work may have marginal or inadequate literacy in healthcare information. With the move towards a more "consumer-centric" health care system as part of an overall effort to improve the quality of health care and to reduce health care costs, individuals need to take an even more active role in health care related decisions. To accomplish this, this paper hereby looks at the essential roles play of librarians on healthcare information literacy.

### **1.1 Health Literacy**

Literacy, in its most direct definition, is the ability to read, write, listen, comprehend, and speak a language. Historically it has been a collection of cultural and communicative practices shared among members of particular groups (National Council of Teachers of English, 2012). But society inevitably changes and so does literacy. In more recent times the term literacy has evolved to refer specifically to the ability to read and write at a level adequate for communication or at a level that lets one understand and communicate abstract ideas (National Council of Teachers of English, 2012).

Health literacy is an emerging concept that involves the bringing together of people from both the health and literacy fields (Gillis and Quigley, 2004). Health literacy builds on the idea that both health and literacy are critical resources for everyday living. Our level of literacy directly affects our ability to not only act on health information but also to take more control of our health as individuals, families and communities. While many definitions for health literacy exist, the definition adopted for this study is, "The degree to which people are able to access, understand, appraise and communicate information to engage with the demands of different health contexts in order to promote and maintain good health across the life-course" (Kwan, Frankish and Rootman, 2006).

According to the Institute of Medicine (IOM) (2004), health literacy results from the interaction of individuals with the social and informational demands of the health contexts in their environment, which could include health care contexts, public health contexts health promotion contexts or chronic disease -management contexts. While they appear to focus on the individual, the members of the IOM committee agreed that health literacy is,

"based on the interaction of the individual's skills with health contexts, the health care system, the education system, and broad social and cultural factors at home, at work, and in the community" (Parker and Kindig, 2006). This synergy between individuals and contexts led Rootman to propose another definition for health literacy as "the degree to which there is a fit between the health information processing demands of different situations and the skills of individuals in those situations" (Rootman, 2002).

Health literacy is broader than general literacy in that it includes not only the ability to read, but the complex health information must be understood and acted upon. Some specific tasks that are influenced by the level of health care literacy are: the ability to analyze risks and benefits of proposed treatments, ability to interpret test results, ability to calculate and measure dosages of medications, and the ability to interpret test results, ability to calculate and measure dosages of medications, and ability to locate the needed health information to assist in these tasks. Glassman, (2008) also states that there are multiple types of literacy needed within the healthcare decision arena: visual literacy or being able to understand graphs and other visually presented information, computer literacy, numerical literacy, and information literacy or being able to obtain relevant information.

Multiple studies that limited healthcare literacy result in poor health and outcomes. The AMA cited in Glassman, (2008) states that poor health literacy is a stronger predictor of a person's health than age, income, education level and employment. People with limited health literacy are more likely to skip preventive health care and wait until they are quite ill before seeking care. This same source also reports that limited health care literacy is associated with increased complications resulting from chronic illnesses such as diabetes, heart disease heart failure, asthma, hypertension, and HIV (Quick Guide to Health Literacy). Studies show there is a higher rate of hospitalization and use of emergency rooms by people with limited literacy skills (Quick Guide to Health Literacy). This adds a huge economic burden to our society and health care system resources. Low health care literacy results in shame for the people involved and as a result people often try to hide their literacy deficits. This lack of understanding regarding instructions for care and medications contributes to a lack of compliance. This leads to continued poor health and morbidity and even untimely death due to failure to treat and manage potentially treatable conditions. This is a critical issue that significantly impacts our whole country and economic system.

## **1.2 Health Information Literacy**

Not having the information, we need when we need it leaves us wanting. Not knowing where to look for that information leaves us powerless. In a society where information is king, none of us can afford that (Lois Horowitz, 2007). In today's society, there can be little doubt that acquiring the ability to retrieve and make use of information is an essential lifelong skill. Information literacy is indeed the root of information, as individuals need information "in order to achieve educational, social, occupational, and economic goals" (Lloyd and Williamson, 2008, p.3). While the concept of information literacy has existed since the 1970s, originating in the workplace, (Lloyd and Williamson, 2008) differences characteristically arise when it comes to determining theories or best practices for implementing this term into instructional settings. In our experiences with information literacy at the University of Calgary Health Sciences Library and the Tom Baker Cancer

Centre, we have shied away from a lecture-based approach, focusing instead on providing tools for the user (the medical student or healthcare practitioner) to think critically and apply what has been learned in class towards solving his/her own research problems.

Webber and Johnston (2000) define an information literate person as one who is "able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (p.382). We echo this notion because our goal is to allow the user to take control of his/her own learning. Rather than merely memorizing a pattern of search techniques demonstrated in class, retention of material will be better attained if the user is able to apply what has been learned.

According to a 2004 report by the Institute of Medicine (IOM), nearly half of all American adults, about 90 million people, have difficulty reading and using health care information. A 2003 National Assessment of adult literacy found that 45% of the US population have basic or below basic skills. Below basic skills consist of being able to sign a form, add amounts on a bank slip, and search simple text for pre test instructions (Health Literacy: a prescription to end confusion, 2004). According to most accepted definition, health information literacy requires a skill set that allows one to: recognize a need for health information, identify sources for the information and be able to retrieve the relevant information, assess the quality and applicability to the specific situation, and analyze, understand and use the information to make good health decisions (Health Information Literacy Task Force Report, 2005).

### **1.3 Libraries**

According to Libschultz (2004) libraries are both the symbol of stability and the embodiment of change. In the past, libraries offered a quiet space for reading, study and reflection. One was surrounded by collections of books, journals and other materials on many topics. Access to quality healthcare information and material is a prerequisite to improving health care literacy. In this new era of change and technology, libraries and librarians have to be creative and assertive to ensure equal access to information that can enhance learning and decision making particularly in the consumer driven area of health care information. The implications of a lack of health care literacy in our population and scope of problem with healthcare literacy are vast in our society and must be addressed.

The Medical Library Association (MLA) formed a task in 2005 to address the issue of the library and librarian role in promoting health care literacy. MLA believes that librarians can impact health care literacy by bridging the communication gap between health care professionals and the public. Librarians are experts in applying criteria to information searches, choosing quality content and teaching consumers how to assess quality in health care information (Nestoer, 2008).

### **1.4 The Roles of the Librarian**

Currently librarians perform a valuable service to both healthcare providers and patients by facilitating quick and easy access to information. It matters little to the researcher that behind the scenes the librarians are dealing with selection, acquisition, licences, hardware requirements and software. What really matters are that relevant information is quickly and easily available to support patients to understand healthcare information.

The traditional roles of the librarian in the era of health care information can be defined as follows.

- **Collection development and acquisition of health care materials:** to select and purchase material related to health care -printed journals, abstracts and indexes, monographs, etc.
- **Cataloguing and classification:** to organize and provide access to health care information - physically and via lists and catalogues.
- **Circulation:** to reserve health care materials for and lend materials to healthcare providers and patients, and recover materials from them.
- **Reference work:** to advise health care information users and to provide and facilitate quick and easy access to health care information.
- **Preservation, conservation and archiving:** to archive, preserve and conserve health care information in perpetuity.

### 1.5 The Roles of Medical Librarians in Healthcare Information Management

Information management skills and networks of information are essential for efficient and effective delivery of health care. Access to information reduces professional isolation and improves the quality of decision making. Studies of health professionals have shown that having access to evidence-based information, improves patient care, reduces health care costs, and assists in prevention of malpractice litigation.

Health sciences librarians train tomorrow's health care providers and biomedical researchers to retrieve, manage, and evaluate information effectively. They support the efforts of health professionals to be lifelong learners, and facilitate recruitment and retention of health professionals in underserved areas by serving as access points and guides to critical information.

Availability of information about the patient is of utmost importance in the medical librarian profession. In order for a medical librarian to provide the patient with the best possible health care information, it is of utmost importance that, all the information past as well as present, about the patient is available to him. The American College of Surgeons recognized the importance of record keeping back in 1928, when the Association of Recode Librarians of North America was established to maintain the high standards of medical records in hospital and other related institutions (AHIMA History, 2008). From then onwards, the quality record keeping and its security has turned into a proper science. Healthcare management of information systems is defined as follows. It is the study of the principles and practices of acquiring, analyzing, and protecting digital and traditional medical information vital to providing quality patient care" (What is health information management, 200).

The general aims of medical librarians in healthcare information management is to interlink comprehensive patient information across the country and to ensure its accessibility in real-time to accomplish on time health care delivery. System interoperability and data interchange is the need of our times. It is the task of medical librarians to ensure the creation of data organization, storage and extraction systems in health and related institutions with the view of providing services across the country (Advocate for Health Policy, 2008). The regulatory body of HIM, the AHIMA has undertaken the task to "advance the role of HIM in informing clinical practice, develop standards to improve data quality



and facilitate information exchange, and help healthcare organizations migrate to the electronic health record (EHR)."

The Medical Library Association (MLA) and Academic Health Sciences Libraries (AAHSL) believe that authoritative information is mission-critical to every health care enterprise. In the spirit of health care reform, MLA and AAHSL support the following priorities to ensure the delivery of quality information for improved health.

1. Formally include the health sciences librarian community in the discussion of health care reform based on their recognized expertise in collecting, organizing, and disseminating health information to support informed clinical decisions, biomedical research, and education of professionals and consumers.
2. Provide robust support of the nation's most important health sciences library on which all other health sciences libraries depend the U.S. National Library of Medicine (NLM). Specifically, provide increased funding for NLM's critical national infrastructure of networks, databases, extramural grant programs, and information and education services, as well as its support of national Health Information Technology (HealthIT) efforts. NLM plays a critical role in building and supporting relationships for sharing all levels of health information.
3. Maintain transparency for federally funded biomedical research through support of the National Institutes of Health Public Access Policy and the recently re-introduced Federal Research Public Access Act (FRPAA) (S. 1373) that mandate public access to the published results of federally funded research. Such access is key to the advancement of scientific discovery and successful health outcomes by accelerating the translation of research results "from the bench to the bedside."
4. Ensure that the developing Health environment includes ready and transparent access to library resources in the Electronic Health Record (EHR) so health care providers can seamlessly link from a patient's EHR to the knowledge base of authoritative health information.
5. Support library network access for all health care providers, independent of physical location, affiliation, or setting. Universal access to quality information supports informed decision making.
6. Offer incentives to health care institutions to provide knowledge-based information resources and services through their libraries and librarians in support of local health care providers and consumers.
7. Support meaningful partnerships between health sciences librarians and a wide variety of local service organizations and institutions to provide consumers, patients, and families with access to authoritative resources and services for informed health care decisions.
8. Mandate that reimbursement plans be structured to include the full cost of providing information resources that support quality patient care, biomedical research, health professional education, and consumer health literacy.

## RECOMMENDATIONS

Based on the above discussion, the following recommendations were made:

- Health care librarians should support patients and users of health care information by developing readable materials for easy understanding.
- Health care providers should develop partnerships with public libraries,' public and private schools, and health care association so as to promote and expand health care literacy opportunities for users.
- There is need for health care librarians to carry out research in the areas of best practice so as to promote health education.
- Librarians should try as much as possible to discharge their duties and roles as a specialist in information acquisition.
- As a final point, librarians should enlighten the users of health care information on how to access quality information.

## REFERENCES

- [1] Gal, I., & Prigat, A., (2005). Why organisations continue to create patient information leaflets with readability and usability problems: an exploratory study. *Health Education Research*, 20 (4), 485 – 493.
- [2] Gillis, D. E., & Quigley, B. A., (2004) Taking off the blindfold: seeing how literacy affects health in rural Nova Scotia. *Report of the Health Literacy in Rural Nova Scotia Research Project* Available at <http://www.nald.ca/healthliteracystfx/findings.htm> [10<sup>th</sup> August 2008].
- [3] Glassman, P., (2008) Health Literacy. Retrieved from National Network of Libraries of Medicine: <http://nnlm.gov/outreach/consunier/html> Accessed on 2<sup>nd</sup> November, 2008.
- [4] Hester, E. J., & Stevens-Ratchford, R., (2009). Health literacy and the role of the speech language pathologist. *American Journal of Speech-Language Pathology*, 18, 180 – 191.
- [5] Institute of Medicine (2004). *Health literacy: A prescription to end confusion*. Retrieved on 2<sup>nd</sup> February 2008 from <http://www.iom.edu/Object.File/Master/19/736/health%20literacy%20final.pdf>
- [6] Kwan, B., Frankish, J., & Rootman, I., (2006) “*The Development and Validation of Measures of "Health Literacy" in Different Populations*”. University of British Columbia Institute of Health Promotion Research and University of Victoria Centre for Community Health Promotion Research, Vancouver.
- [7] Libscluiltz, Q., (2004) A Perfect Partnership-Libraries and Literacy Providers. *Connecting magazine*.
- [8] National Institute of Health, (2012) Health Literacy. Retrieved from <http://grants.nih.gov/grants/guide/pa-files/PAR-Q4-116.html> Accessed on 22<sup>nd</sup> July 2012.
- [9] Parker, R., & Kindig, D., (2006). Beyond the Institute of Medicine Health Literacy Report: Are the Recommendations Being Taken Seriously? *J Gen Intern Med*, 21 (8): 891 – 892.
- [10] Rootman, I., (2009). *Health Literacy: What should we do about it?* Presentation at the University of Victoria, BC. Canada.

- [11] Rootman. L, (2002). Health Literacy and Health Promotion. Ontario Health Promotion E-Bulletin. Retrieved from: [http://www.ohpe.ca/index2.php?option=com\\_content&dopdf=1&id=175](http://www.ohpe.ca/index2.php?option=com_content&dopdf=1&id=175) Accessed 15<sup>th</sup> July 2012.
- [12] Ross, J., (2007). Health literacy and its influence on patient safety [Electronic Version]. *Journal of Peri Anesthesia Nursing*, 22 (3), 220 – 222.
- [13] Zagaria, M. E., (2006). Low Health Literacy: A Safety Concern Among the Elderly [Electronic Version]. L7. S. *Pharmacist*, 31, 28 – 34. Retrieved 8th June 2010 from <http://www.uspharmacist.com/content/d/senior%20care/c/1154/Q>